Development at the Urban Fringe and Beyond Impacts on Agriculture and Rural Land

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I. Overview

In the early 1970's, bipartisan legislation was introduced in Congress to establish a national land-use policy, but failed after extensive debate. In the decades that followed, urban area in the United States has more than doubled. Public concerns about ill-controlled growth once again have raised the issue of the Federal role in land-use policy.

Purpose of This Report

Although land-use issues have traditionally been the prerogative of State and local government, policymakers at the Federal level are increasingly urged to respond to concerns about development and growth, particularly with regard to their impacts on agriculture and rural land uses. While anecdotes are legion, and much has been written by commentators, advocates, and experts, there are surprisingly few places to find a comprehensive picture of land-use changes in urbanizing areas, relative to the rural landscape. This report responds to that need in two ways.

This overview provides a summary of our findings about the forces driving development, its character and impacts on agriculture and rural communities, the means available to channel and control growth, and the pros and cons of potential Federal roles.

The following chapters provide the details, presented in a documented, objective way that make the case for the arguments presented here. A consensus culled from the literature supports some of the points, while original analyses presented in this report have not been published elsewhere.

What is Sprawl?

This report is about urban development at the edges of cities and in rural areas, sometimes called "urban sprawl." With no widely accepted definition of sprawl (U.S. GAO, 1999; Staley, 1999), attempts to define it range from the expansive to the prescriptive.

Most definitions have some common elements, including:

- Low-density development that is dispersed and uses a lot of land:
- Geographic separation of essential places such as work, homes, schools, and shopping; and
- Almost complete dependence on automobiles for travel.

Without an agreed definition, any growth in suburban areas may be accused of "sprawling."

Short of a return to a form of urban living not seen since before World War II, it is not clear how growth can be accommodated at suburban densities without incurring the worst features of "sprawl." Because "sprawl" is not easily defined, this report is couched in the more neutral terms "development" or "growth," without making implicit judgments about the quality or outcomes of that development or growth. See Trends In Land Use: Two Kinds of Growth p. 9.

How To Think About Development

Concerns about development around urban areas are not new, but have arisen periodically during most of the last century, and certainly since automobile ownership

became widespread after World War II. Amid the environmental concerns during the 1970's, bipartisan legislation was introduced in Congress to establish a national land-use policy. Recognizing the primacy of State authority over land use, the legislation sought to provide Federal grants to States to strengthen their ability to plan for development and channel growth. After 5 years of debate, the legislation was passed in the Senate, but narrowly defeated in the House on June 11, 1974. What lessons have been learned about urban development and the Federal role in managing it in the 26 years since then?

There are two kinds of growth, but both affect the amount and productivity of agricultural land and create other problems—Our existing urban areas continue to grow into the countryside, and more isolated large-lot housing development is occurring, generally beyond the urban fringe.

At the urban fringe—The urban "fringe" is that part of metropolitan counties that is not settled densely enough to be called "urban." Low-density development (2 or fewer houses per acre) of new houses, roads, and commercial buildings causes urban areas to grow farther out into the countryside, and increases the density of settlement in formerly rural areas. The extent of urbanized areas and urban places, as defined by the Bureau of Census, more than doubled over the last 40 years from 25.5 million acres in 1960 to 55.9 million acres in 1990, and most likely reached about 65 million acres by 2000.

Beyond the urban fringe—Another kind of development often occurs farther out in the rural countryside, beyond the edge of existing urban areas and often in adjacent nonmetropolitan counties. Development of scattered single-family houses removes land from agricultural production and changes the nature of open space, but is not "urban." Large lots dominate this process, and growth in large-lot development has accelerated with business cycles since 1970. Nearly 80 percent of the acreage used for new housing construction in 1994-97—about 2 million acres—is outside urban areas. Almost all of this land (94 percent) is in lots of 1 acre or larger, with 57 percent on lots 10 acres or larger. About 16 percent was located in existing urban areas and 5 percent was on farms. See Two Kinds of Growth, p. 12.

Growth in developed areas is increasing, but at rates only slightly higher than in the past—Urbanized areas and urban places increased at about the same 1

million acres per year between 1960 and 1990. Developed land, including residential and other development that is not dense enough to meet urban definitions, increased from 78.4 million acres in 1982 to 92.4 million acres in 1992, and was estimated to be about 107 million acres in 2000. The rate of increase in developed land grew from 1.4 million acres per year to about 1.8 million acres. See *Two Kinds of Growth*, p. 12.

The processes of land-use change are well understood and flow predictably from population growth, household formation, and economic development— Changes in land use are the end result of many forces that drive millions of separate choices made by homeowners, farmers, businesses, and government. The ultimate drivers are population growth and household formation. Economic growth increases income and wealth, and preferences for housing and lifestyles, enabled by new transportation and communications technologies, spur new housing development and new land-use patterns. Metropolitan areas grow organically, following well-known stages of growth.

Almost alone among developed nations, the United States continues to add population from high fertility rates, high immigration, and longer life expectancy, increasing 1 percent per year, or another 150 million people by 2050. Average household size has dropped to 2.6 persons, creating about 1 million new households, the unit of demand for new housing, each year in the 1990's.

Increased income and wealth increased the number of new houses constructed each year by 1.5 million units, faster than the rate of household formation. Two-thirds of these houses are single-family dwellings. While average lot sizes have been dropping near cities as owners turn to townhouses and condominiums, a parallel growth in large-lot (greater than 1 acre) housing has occurred beyond the urban fringe.

Metropolitan expansion since 1950 has occurred because rural people moved off the farms, and residents of the densely populated central cities dispersed to surrounding suburbs. Urbanized areas (excluding towns of 2,500 or more) increased from 106 to 369 and expanded to five times their size. Population density in urbanized areas dropped by more than 50 percent, from 8.4 to 4 people per acre, over the last 50 years. Growth is spilling out of metropolitan areas, as population disperses to rural parts of metropolitan counties and previously rural nonmetropolitan counties.

Enabling this dispersion are investments in new infrastructure such as roads, sewers, and water supplies. New information and communication technologies, such as the Internet and cellular telephone networks, facilitate population in rural areas, and free employment to follow. New retail, office, warehouse, and other commercial development follows in the wake of new housing development, to serve the new population and to employ the relocated labor force. See *Driving Forces*, p. 15.

There are benefits of low-density development that attract people—Living beyond the edge of the city is a lifestyle much sought after by the American people. While 55 percent of Americans living in medium to large cities preferred that location, 45 percent wanted to live in a rural or small town setting 30 or more miles from the city (Brown et al., 1997). Of those living in rural or small towns more than 30 miles from large cities, 35 percent wanted to live closer to the city. The urban fringe is thus under development pressure from both directions. The most obvious benefit is that growth in rural areas has allowed many people, including those who cannot afford city real estate, to buy single-family homes because land costs are cheaper on the fringe than in the core.

The automobile imposes private and social costs in exchange for the comfort, flexibility, low door-to-door travel time, freight-carrying capacity (for shopping trips), cheap long-distance travel, and aesthetic benefits of extensive, automobile-dependent development. Air quality improvements may also result from decentralizing population and employment, because emissions are dispersed over larger rural airsheds and are reduced by higher speeds. Automobile pollution is more strongly related to the number of trips than to the length of each trip, with a major part of auto pollution deriving from cold starts.

Not everyone wants to live the rural lifestyle. The "new urbanism" school of urban design is redesigning conventional suburban developments as small towns and finding a market (Chen, 2000; Duany et al., 2000). In 1992, 55 percent of those surveyed living in large cities (over 50,000) preferred that type of community (Brown et al., 1997). See *Demand for Low-Density Development*, p. 17.

Development imposes direct costs on the communities experiencing it, as well as indirect costs in terms of the rural lands sacrificed to it—A number of studies show that less dense, unplanned development

requires higher private and public capital and operating costs than more compact, denser planned development. Eighty-five studies gauging the cost of community services around the country have shown that residential development requires \$1.24 in expenditures for public services for every dollar it generates in tax revenues, on average. By contrast, farmland or open space generates only 38 cents in costs for each dollar in taxes paid. See *Impacts on Taxpayers*, p. 28.

Finally, development can disrupt existing social, community, environmental and ecological patterns, imposing a variety of costs on people, wildlife, water, air, and soil quality. Agricultural production has its own negative environmental impacts, but these are generally less severe than those from urban development. See *Impacts on Landscape, Open Space, and Sense of Community*, p. 31.

However, does moving out into the "country" ultimately destroy all the good things that prompt that move? In the words of the National Governor's Association, "In the context of traditional growth patterns, the desire to live the 'American Dream' and purchase a single-family home on a large lot in a formerly open space can produce a negative outcome for society as a whole" (Hirschorn, p. 55).

Continued demand for low-density development despite negative consequences for residents can be understood as a market failure—Consumers, businesses, and communities fail to anticipate the results of development because they often lack information on potential or approved development proposals for surrounding land. When communities fail to plan and zone, there is no institutional framework within which development can proceed, and little information to help housing buyers anticipate their future landscape setting.

Spillovers from development include the loss of rural amenities, open space, and environmental goods when previously existing farms and rural land uses are developed. Negative spillovers from increased housing consumption in developing areas can include traffic congestion, crowding, and destruction of visual amenities. If the landscape features that contribute to rural amenity were marketed in developments, housing prices would be higher.

Real estate markets are based on many small decisions which, when taken without an overall context, produce results that can neither be envisioned by nor anticipated by consumers and developers. Cumulative impacts

from this myriad of decisions can be large, but are not reflected in market prices until disamenities become large. Inaccurate judgments about future landscapes are locked in because development is irreversible. See *An Economic Interpretation of the Demand for Low-Density Development*, p. 36.

Urban growth and development is not a threat to national food and fiber production, but may reduce production of some high-value or specialty crops— Despite doubling since 1960, urban area still made up less than 3 percent of U.S. land area in 1990 (excluding Alaska). Developed area, including rural roads and transportation, made up less than 5 percent in 1992. Development affects local agricultural economies and can cause other environmental and resource problems in local areas, but the increase in urban area in the United States poses no threat to U.S. food and fiber production. Some crops in some areas are particularly vulnerable to development. For example, 61 percent of U.S. vegetable production is located in metropolitan areas, but vegetable production takes up less than 1 percent of U.S. cropland. See Consequences for Farming, p. 38.

Agriculture can adapt to development, but does so by changing the products and services offered—

Low-density, fragmented settlement patterns leave room for agriculture to continue. Farms in metropolitan areas are an increasingly important segment of U.S. agriculture. They make up 33 percent of all farms, 16 percent of cropland, and produce a third of the value of U.S. agricultural output. However, to adapt to rising land values and increasing contact with new residents, farmers may have to change their operations to emphasize higher value products, more intensive production, enterprises that fit better in an urbanizing environment, and a more urban marketing orientation.

Development can be profitable for farmers who can see and take advantage of opportunities in the new situation. Forces of urbanization allow a variety of farm types to coexist. Farms in metropolitan areas are generally smaller, but produce more per acre, have more diverse enterprises, and are more focused on high-value production than nonmetropolitan farms. Metropolitan agriculture is characterized by recreational farmers who follow both farm and non-farm pursuits; a smaller group of adaptive farmers who have accommodated their farm operation to the urban environment; and a residual group of traditional farms that are trying to survive in the face of urbanization. Both of the latter

types are generally working farms. See *Consequences* for Farming, p. 38.

Benefits of conserving rural land are difficult to estimate, and vary widely depending on the circumstances—Because there are no markets for some characteristics of land, such as scenic amenity, there are no observable prices apart from the land's value for development. Lacking prices, it is difficult to develop economic benefit measures for policymaking.

Rural lands in a working landscape provide economic benefits as resources for agricultural production, as sources of employment, and through property and income taxes. Working landscapes are defined as farm, ranch, and forest lands actively used in agricultural or forestry production. While agricultural production can create environmental problems of its own, properly managed farmlands provide nonmarket benefits from improving water and air quality, protecting natural biodiversity, and preserving wetlands relative to development. They create aesthetically pleasing landscapes and can provide social and recreational opportunities. The rural landscape reflects and conserves rural culture and traditions, and maintains traditions of civic leadership and responsibility in voluntary rural institutions, such as fire companies and village boards. See Impacts on Landscape, Open Space, and Sense of Community, p. 31.

Based on information and assumptions about the number of acres likely subject to development in the future, and on limited studies of residents' willingness to pay to conserve farmland and open space, we estimate that households would be willing to pay \$1.4-\$26.6 billion per year to conserve rural lands. In addition, another \$0.7-\$1.1 billion in sediment and water quality damages would be avoided if the land were prevented from being developed. Conserving land for agriculture helps preserve farming as a part of the rural economy, and is often seen as a bulwark against the worst effects of development. See *Benefits of Farmland and Open Space*, p. 44.

Local governments generally do not develop adequate capacity to plan for and manage growth until it is too late to effectively channel development—
Because urban growth processes are well understood, strategically directing development to the most favorable areas well in advance of urban pressures offers the greatest hope for controlling growth. Planning and zoning have generally been upheld by the courts as valid regulation so long as a reasonable basis for them is laid

out. If planning is not in place as development begins to occur, property owners' expectations about higher land values can exacerbate property rights conflicts and complicate subsequent growth-control efforts. Local governments often fail to appreciate impending growth facing them, and generally lack capacity to develop adequate responses before growth overwhelms them.

Better planning and zoning is central to the ability to respond to growth. A U.S. General Accounting Office survey found that 75 percent of the communities that were concerned with "sprawl" were highly involved in planning for and managing growth (U.S. GAO, 2000, p. 99).

However many cities and counties may be falling short of what is needed to control and manage growth effectively. A recent survey of Alabama's mayors and county commissioners found that only a minority of the responding officials (18 percent of the mayors and 19 percent of the commissioners) believed they currently had the necessary staff and resources to plan and manage growth effectively. High-growth communities were only somewhat more likely to have the capacity to manage growth than were other communities.

Most of the smaller rural towns do not have a full-time planner. To meet their planning needs, these communities may be served by a circuit riding planner, or several towns and a county may combine their efforts to set up one planning office to serve their joint needs. Even at the county level, rural planners often must spend part of their time doing other duties. See *Local Responses to Growth*, p. 50.

State governments can do more to deal with growth strategically—Our Constitution reserves control of land use to the States, which usually have delegated the responsibility to local governments. Increasingly, States are realizing that local governments cannot adequately address growth pressures that transcend local boundaries. Some States have adopted "smart growth" strategies that actively direct transportation, infrastructure, and other resources to channel growth into appropriate areas.

The term "smart growth" is a catch-all phrase used to describe a group of land-use planning techniques that influence the pattern and density of new development. In general, smart growth strategies represent a movement away from State-imposed requirements for local compliance with State planning goals. Because smart growth strategies tend to use financial incentives to

encourage voluntary adoption, they are generally supported by a broad spectrum of interest groups. These strategies also garner support because they direct, rather than inhibit, growth and development. There's no 'one size fits all': the specific smart-growth strategies that have been adopted vary by location but often share common elements. Smart-growth principles favor investing resources in center cities and older suburbs, supporting mass transit and pedestrian-friendly development, and encouraging mixed-use development while conserving open space, rural amenities, and environmentally sensitive resources (Hirschhorn 2000). These strategies also typically remove financial incentives provided by State funding to develop outside designated growth areas. In essence, smart growth encourages development in designated areas without prohibiting development outside them. See Slow Growth, No Growth, and Smart Growth, p. 55.

Existing monetary incentives for conserving rural land are not as effective as they could be—Use-value assessment, enacted in every State, is one of the most widespread public policies aimed at conserving rural land. Under use-value assessment, the owner is taxed based on what the land could earn in agriculture, rather than the higher developed value. We estimated the cost of tax reductions under use-value assessment nationally at \$1.1 billion per year.

However, most students of use-value assessment acknowledge that it is not effective at preventing development. use-value assessment spreads resources over all qualifying rural land, providing a small incentive to conserve land to all landowners. The size of the tax reduction is insufficient to keep land with the highest development potential from conversion, while tax expenditures to less developable land produce little result. Redirecting tax expenditures on use-value assessment could increase the resources available for incentives to conserve the most developable land, but could make some land currently getting the tax subsidy more vulnerable to urbanization and would face stiff opposition from property owners currently enjoying the tax reduction. See Monetary Incentives for Conserving Farm and Forest Land, p. 57.

The cost of effective incentives would be large, but if resources were redirected, almost one-third of the cropland with the greatest development potential could be protected—Purchasing the development rights to rural land effectively protects it from being developed. The landowner retains ownership and can continue to farm the land, but the deed restriction con-

tinues indefinitely. The implicit economic value of the easement is the difference between the unrestricted or market value of the parcel and its restricted or agricultural value.

Nineteen States have State-level PDR (purchase of development rights) programs using public funds to compensate landowners for the easements on otherwise private farm or forest land. In addition, at least 34 county programs in 11 States operate separate programs. The American Farmland Trust estimates that, nationwide, PDR programs have cumulatively protected 819,490 acres of farmland with an expenditure of \$1.2 billion.

We estimate the cost to purchase development rights on cropland most likely subject to urban pressure over the next 30 to 50 years at \$88-\$130 billion. If tax expenditures currently devoted to use-value assessment were redirected to purchase of development rights, almost one-third of the cropland with greatest potential for development could be protected.

Targeting funds to land under less development pressure could protect the same amount of land at lower cost. For example, development rights on the 25 million acres under medium urban pressure are estimated to cost \$25 billion, less than one-third the cost of the 33 million acres under heaviest development pressure. Selecting land with lowest current development pressure would reduce costs to \$18 billion.

Even if funds were available to purchase development rights, it may not be desirable to do so. The development pressure exerted on this land will not disappear if this cropland is protected. While some growth might be accommodated in existing urban areas, demand for other rural land would intensify, and growth could fragment even more as development moves out farther into the rural countryside. Purchasing development rights is also no guarantee that the land will be used for working agricultural enterprises. The perpetual deed restrictions could prevent future desirable adjustments in land-use patterns. See *Monetary Incentives for Conserving Farm and Forest Land*, p. 57.

There are neither clear requirements for nor restrictions on Federal roles in managing growth—Historically, authority over land-use decisions has been reserved to the States, who have delegated these powers to local governments. However, the evolution of environmental policy shows an expanding Federal involvement in site-specific, local circumstances that recur

across the Nation. The Federal Government has no constitutional mandate to take action on urban growth and development issues, but it can define an appropriate role for itself. See *Potential Federal Roles*, p. 65.

Federal activity in the potential roles identified below is described and pros and cons of expanding each role are enumerated.

Potential Federal Roles

Helping Increase State and Local Planning Capac-

ity—The Federal Government has had a long history of programs to improve the planning capabilities of State and local governments. Perhaps the most notable of these efforts was the HUD 701 planning grant program, established in 1954 (40 USC 461). As late as 1975, the HUD 701 program spent \$100 million per year paying as much as two-thirds of the costs of an "ongoing comprehensive planning process" required of all grant recipients. However, the budget was cut to \$75 million in 1976 and was gradually phased down until eliminated in the early 1980's.

Within the U.S. Department of Agriculture, the Rural Development Act of 1972 established the Section A-111 Rural Development Planning Grants, also funded into the 1980's. In 1996, the farm bill established new authority for the Rural Business Opportunity Grant program (RBOG), which received \$3.5 million in FY2000 appropriations. RBOG provides money to nonprofits, public bodies, Indian tribes, and cooperatives for planning and technical assistance to assist economic development in rural areas. FY 2001 appropriations legislation increased the funding for RBOG to \$8 million. Several other smaller USDA grant programs could potentially assist local communities with planning, but they are not specifically directed at planning to guide growth and development and are not integrated into a coordinated program.

Pros—Funding requirements for such programs would be relatively small, and could potentially leverage significant impacts. Impacts from limited funding for such programs could be increased by targeting them to the areas most likely affected by growth in the medium term. Limiting program activities to those most directly relevant to guiding new growth and development would also increase the impact of the program.

Cons—Failures in past programs were attributed to wide use of consultants who provided little service for the money spent, and who did little to add permanently

to local government planning capacity. Emphasis on "paper plans" did little to actually direct growth. Targeting funds to areas immediately affected by development wasted resources on efforts that were already too late, while spreading funding widely included areas with little development pressure in reasonable timeframes.

Coordinating Local, Regional, and State Efforts—

Urban growth processes often create multi-jurisdictional impacts. Federal coordination and integration have been exercised in other areas of environmental concern, such as water quality, water quantity, and air quality. In addition, the U.S. Office of Management and Budget Circular A-95 review process formerly guided Federal agencies for cooperation with State and local governments in the evaluation, review, and coordination of Federal assistance programs and projects. A-95 review is no longer mandated by the Federal Government, although the process is still voluntarily practiced by some States. USDA has had a long history of areawide coordination, dating back to efforts like the Great Plains Agricultural Council, the Resource Conservation and Development Council (RC&D), the Small Watershed Program (PL-566), and various river basin planning processes. While these have generally been focused on agricultural, resource, or rural development concerns, their extension to urban development and growth control issues would be reasonable.

Pros—Past Federal funding for transportation, water, and sewer construction and other major infrastructure projects has been identified as a major driver in growth and development. Explicitly monitoring and reviewing potential impacts on urbanization from such investments could, at a minimum, defuse these accusations. Federal funding could serve as a rationale for efforts to coordinate State and local growth control activities, especially where these cross jurisdictional boundaries. Such efforts would cost very little, but would leverage existing expenditures.

Cons—Without convincing resolution to reduce or deny funding to State and local governments that do not cooperate, attempts at coordination could prove futile and frustrating. Congressional attempts to obtain additional funding for local constituents can be at odds with Executive branch notions of coordination and integration.

Coordinating Federal Development Activities and Growth Management Goals—Lines between areas needing development assistance and those suffering from problems of growth and development are geographic ones, and are often exceedingly fine, and shift over time. The Federal Government has had a long history of programs to foster development, and less experience at helping control it. The superficial dichotomy disappears when considered in the context of directing growth and development to appropriate places and under an appropriate timetable, which serves both sets of interests.

Pros—A wide array of rural development and economic development activities in the Departments of Agriculture and Commerce, abetted by less direct activities in the Departments of Housing and Urban Development, Transportation, and Defense, date at least to the War on Poverty and related efforts of the 1960's. The existing institutional structure of these programs could be redirected to growth control and management, but would require new visions by leadership. Some existing resources could be leveraged.

Cons—These programs have become entrenched and rather balkanized and may be difficult to integrate into an effort of sufficient weight to effectively deal with the problem. While pro- and anti-growth interests would hopefully recognize common ground in well-planned and appropriate development, extremes on both sides may be difficult to persuade, and both sides may be suspicious of Federal help.

Funding Monetary Conservation Incentives—The Federal Government has often been enlisted as an ally with deep pockets, and analogous programs for soil and water conservation, wildlife habitat acquisition, and other land resource issues have existed since the 1930's. USDA's Farmland Protection Program was authorized in the 1996 Farm Act for up to \$35 million in matching funds for State programs over 6 years. The initial funding was \$33.5 million and it was spent to protect 127,000 acres in over 19 States. The goal of the program is to protect between 170,000 and 340,000 acres of farmland. An additional \$10 million was appropriated in FY2000. Direct Federal acquisition of easements is included in USDA's Conservation Reserve Program and Wetland Reserve Program, as well as in several of the U.S. Fish and Wildlife Service's habitat programs.

Pros—Limited Federal funding for farmland protection easements could act as seed money for programs in States with no current program, or as a bonus for States doing a particularly effective job. Utilizing existing State programs may be cost-effective because it both

avoids creating a new bureaucracy within the Federal Government and provides an incentive to States that have not yet developed a program to do so. By carefully specifying rules for matching State funding, such a program could avoid discouraging State effort, and could maximize the incentive for new programs.

Cons—As outlined above, the amount of land and resources subject to development is large and State programs are relatively small, posing questions about the effectiveness of a small Federal program and larger questions about the ultimate size needed to make an impact. While the marginal benefits of a small program at this point are likely to be greater than the costs, the wisdom of a larger program becomes problematic. Questions about the displacement of growth and the longrun fate of protected land become more significant as the amount of land protected increases.

Conserving Rural Amenities as Part of Greater Agricultural and Trade Policy Goals—Conserving the amenities provided by rural land is no longer a matter of merely domestic concern. Proposals to direct agri-environmental assistance are widespread in the European Union and other Organization for Economic Cooperation and Development (OECD) countries. Such efforts meet the "green box" requirements for acceptable agricultural policies under agricultural trade reforms in the Uruguay Round of the General Agreement on Tariffs and Trade (GATT). Some proponents of greater Federal involvement in rural land conservation believe that a larger share of Federal funding for agriculture could be directed toward land conservation through agri-environmental payments designed to preserve more of the multiple functions of agriculture in an urbanizing context. While not required by trade agreements to date, such proposals are allowed by them and may garner support from constituents in urbanizing areas, the urban fringe, and among agricultural communities.

Pros—Frameworks for agri-environmental payments have already been proposed in the form of the Conservation Security Act of 2000 (S.3260/H.R. 5511), introduced by Senator Harkin and Congressman Minge, and in the Clinton Administration's proposal for a Conser-

vation Security Program in October 2000. While not explicitly addressing farmland protection, eligible land in urbanizing areas could be included. This kind of program helps align U.S. agricultural support programs with legitimate purposes recognized in trade liberalization agreements.

Cons—The farmland conservation issues in Europe and the United States are fundamentally different. While European efforts are largely aimed at keeping economically marginal farmland from abandonment, U.S. concerns are with preventing otherwise viable farms from being developed. The latter is a far more expensive proposition. Channeling large amounts of assistance to farms in urbanizing areas risks losses if incentives are not sufficiently large to prevent development, and may be pyhrric if protected farms cannot viably continue in operation, despite protection. On balance, preventing the environmental problems from losing farms in urbanizing areas may not yield benefits as large as correcting environmental problems from farming in more rural areas.

Organization of the Remainder of the Report

The remainder of the report provides a more in-depth, documented discussion of this overview. The next two chapters describe trends in land use and the two kinds of growth that are occurring around cities, then enumerate the driving forces behind these trends. The fourth chapter describes the costs of growth in rural areas, including public and taxpayer costs, and the environmental and other benefits of conserving farmland. The fifth chapter outlines consequences for agriculture and looks at the problems and opportunities presented by urbanization. A partial estimate of the nonmarket benefits of farmland conservation is derived from the literature on willingness-to-pay for farmland preservation. The sixth chapter looks at State and local responses to urban development, provides information on local capacity to deal with growth, and summarizes the new State initiatives characterized as "smart growth." The final chapter ends the report with an assessment of potential Federal roles.